FORENSIC ADDICTION SPECIAL ISSUE

SCANbites

"Nothing is more rewarding than seeing patients benefit from treatment" *Page 4*

The quarterly newsletter of the Specialist Clinical Addiction Network | Summer 2009 | Volume 6 Issue 2 ISSN 1744-6112

READY TO BE FIRED?

Retendering of addiction services revealed by SCAN survey

Amy Wolstenholme

Community drug and alcohol services in England and Wales are facing a new threat of being put out to tender or, in some instances, decommissioned with no opportunity for current providers to bid, according to a recent survey carried out by SCAN. Feedback from clinical leads of services on the immediate and potential longer term implications of this process have highlighted a number of concerns about the quality and continuity of patient care.

The apparent spread of this commissioning practice suggests that it has, in some areas, become the preferred model to achieve service improvement. Yet it is somewhat at odds with the most recent literature and guidance. The Darzi report places emphasis on "enhancing professionalism" and states: "we challenge all organisations that do business as part of, or with, the NHS to give clinicians more control over budgets and HR decisions", and the Department of Health's guidance on World Class Commissioning identifies 11 commissioning competencies including: to "Work collaboratively with community partners to commission services that optimise health gains and reductions in health inequalities", and to "lead continuous and meaningful engagement with clinicians to inform strategy, and drive quality, service design and resource utilisation" – all very good in theory.

SCAN survey

A survey of SCAN members and affiliates across the UK was undertaken in response to increasing informal reports from addiction specialists about services going to tender and being subsequently lost, in the main, to non-statutory bidders. SCAN wanted to gain a clearer national picture and gauge the impact this is having on service provision. A 5-question email survey was sent to all SCAN members and affiliates in the UK, and all responses were anonymised.

Forty responses were received. This confirmed that retendering is a problem currently facing only England and Wales. We are aware of the loss of several consultant addiction psychiatrist posts, which is one reason some of these areas are unaccounted for in this interim report. While the survey is not yet complete the interim findings will be described. Many of our respondents were accountable for more than one service contract, and most had had some experience of re-commissioning: 45 services →

In this issue

■ Sally Braithwaite reviews the recent changes to English case law for diminished responsibility due to alcohol dependence (page 6). Martyn Egerton, consultant clinical biochemist, reviews the role of ethyl glucuronide as a marker for excessive drinking in forensic and clinical settings (page 11). Aideen O'Kane reviews a textbook on forensic addiction medicine and psychiatry (page 5).

■ We lead with Amy Wolstenholme's report on a new SCAN survey on addiction specialists' experiences of retendering. Colin Drummond considers the implications of the survey findings for the field.

■ Frank Ryan reviews the NTA's recent Routes to Recovery toolkit (page 7) and in our Historical Review series Caroline Cooper takes us back to pioneering 1950s research which laid the foundation for modern alcohol withdrawal management (page 15). Filippo Passetti and Ken Checinski question the usefulness of TOP as a measure of alcohol treatment outcome (page 10).

■ Colin Drummond and Julia Sinclair guide us through the complexities of getting clinical research funded (page 12) and three consultants reflect on the realities of their first two years "on the job" (page 4).

■ This issue's interview is with Anne Lingford-Hughes, new Professor of Addiction Biology at Imperial College, and overcoming the challenges of female academic careers. (page 8)

TENDERING

from a total of 54 (see table below).

Of the 45 services involved in retendering, 31 had completed the process, three were in the middle of bidding, and 11 were preparing for imminent retendering.

Of the 31 services who had completed a retendering process:

- 16% were regained by NHS providers
- 42% went to non-statutory providers
- 13% to non-statutory and NHS partnerships
- 10% were awarded to PCTs
- 7% to GP-led consortia
- 17% reported being decommissioned without the opportunity to bid

	Services/contracts recommissioned OR in process of bidding
London	11
South East	11
South West	4*
West Mids	5
North West	0*
North East	4*
Yorks and Humber	7
East Mids	0
East of England	1
Wales	2
TOTAL	45

* Possibly more

There may initially seem little wrong with driving competition to achieve the best, most economical service. But from the qualitative responses, there is growing concern that cost is the main driving force for decision-making to the exclusion of other considerations. Similarly increasing numbers in treatment seem to largely outweigh other priorities. Most addiction specialists leading services in the NHS are concerned with a wider range of issues affecting quality of patient care.

These issues often seem compromised to some degree by the outcome of the tendering process, which is perceived to be leading to a more fragmented care system for misusers.

The retendering process is widely perceived to be disruptive to both patients and staff, and appears to place little importance on quality or continuity of care. There is widespread concern that patients are falling through gaps during the retendering process and there have been reports of untoward clinical incidents as a result of poor continuity of care and lack of effective clinical governance procedures.

There are new and unclear boundaries about patient confidentiality. The climate of bidding for contracts leads to rivalry between competing (often neighbouring) services and demands that providers do not communicate with each other during the process leading to an atmosphere of distrust.

Patients with more severe and complex needs are perceived by respondents as being particularly vulnerable during retendering processes, and are felt to be either explicitly or implicitly regarded as lower priority by some commissioners. Information about new, replacement services is often not provided until the last minute of handover, leaving staff and patients confused about their place within the new structures.

Staff are reported to be suffering from low morale, with some being lost from services due to lack of job security or anxiety about changing terms and conditions of employment. The time and resources involved in preparing for the bidding process itself is putting additional pressure on teams, not to mention the recruitment processes for new and replacement staff.

Training posts are reported to be threatened, as some new service models are unable to provide this aspect of workforce development, nor has training been included in most of the tender specifications. Training may be viewed as an expensive 'optional extra' when costing services and achieving 'value for money'. Indeed, trainees caught in the middle of a retendering exercise run the risk of not completing their required period for accreditation in the addiction speciality essential for CCT and career progression.

There is wide concern that essential aspects of training staff to care for this patient group in the future could be compromised. This could translate into a deficit of qualified addiction consultants and other professionals for multidisciplinary teams.

The process of retendering has also been criticised. Many respondents refer to a lack of clarity of the criteria being used to judge the bids. For example one NHS provider was not informed of maximum cost, but was left with the caveat they would be disqualified if they came in too high! There has also been an absence of rationale when awarding bids or decommissioning seemingly well-functioning services. Staff have been baffled by not being shortlisted when they had recently achieved Foundation Trust status. Contracts have been awarded to services whose staffing and service models do not appear to be appropriate for the local patient population. Of particular concern is the decommissioning of three innovative specialist young people's services in England.

Also reported are unacceptable delays in the provision of information on replacement service structures by new providers, as well as staffing arrangements and job contracts (under TUPE), making career decisions even more difficult and stressful than they need be. Cases of commissioners using the possibility of retendering as a threat to force changes in service delivery have been reported.

Conclusion

So just where is the drive for this radical style of commissioning coming from?

Clinicians after all are not contestants on *The Apprentice* – they have often invested a lifetime building up services, developing trusting relationships with their patients, researching and improving treatment, enhancing quality of care, training multidisciplinary workforces of addictions professionals... the list goes on.

Unfortunately these findings point to a system of commissioning which is alienating frontline clinicians, creating unhelpful competition between providers and compromising patient safety with a loss of expertise from the field. Some commissioners are perceived to be adopting an unhelpfully confrontational style with providers.

There seems to be little attempt to trial alternatives, such as renegotiation of service level agreements or service redesign. The short term focus on increasing numbers in treatment is perceived by many respondents to our survey as threatening long term quality of care, and is more likely to result in patients remaining on in the treatment system long-term without all the benefits which come with well-rounded multidisciplinary teams working cohesively towards their recovery.

All of this seems to be moving in the opposite direction from Darzi and the DoH's vision for the NHS where clinicians should be actively engaged to achieve service improvement, rather than the adversarial atmosphere reported by many SCAN members. Some examples of retendering revealed by our survey seem to be underpinned by short term policy objectives to achieve quantity driven targets. This may come at a cost to the long term sustainability of the treatment field. We therefore feel it would be timely for DH and the NTA to review the results of our survey within the wider strategic context for the substance misuse treatment field.

Amy Wolstenholme, SCAN Project Coordinator

REFERENCES

Department of Health (2008) High Quality Care For All. Department of Health, London.

Department of Health (2007) World Class Commissioning. Department of Health, London

Comment

Tenderisation of addiction treatment

Colin Drummond

Faithful SCANbites readers may recall an episode of St Hilda's which explored the comic potential of a fictitious re-tendering process in the troubled Borough of Hackworth, with predictably nasty consequences for Dr Meek and the team.[1] Now a new SCAN survey reveals that re-tendering is increasingly being used by commissioners across England and Wales as a means of re-shaping addiction services. Apocryphal? Life imitating art? It is certainly disturbing that this practice has become widespread, and some of the comments received from addiction specialists affected raise concerns beyond any envisioned by the authors of St Hilda's.

Amy Wolstenholme's article (in this issue) suggests that in some areas re-tendering has become a preferred method of redesigning services, often with the aim of increasing numbers of people in treatment at the same or reduced cost by moving services out of the NHS to non-statutory providers. While the aim of improving treatment access is laudable, senior clinicians are concerned that this will be at the cost of quality and comprehensiveness of care. Training capacity is being reduced in this new, 'no frills' treatment approach, with knock-on effects on current addiction trainees and multidisciplinary staff. Experienced professionals are being lost to the NHS. There is concern that this process is being driven by short term financial objectives that will affect the long term sustainability of the treatment field.

It would be wrong to suggest that re-tendering should never be an option. However, nor do we believe it should be a first option to change the way services are provided. But we have found that in some cases other solutions have not been explored before moving to this radical option. While these problems are by no means universal, our survey reveals that retendering engenders hostility and confrontation between commissioners and providers, and between local providers. There are several examples where it has compromised continuity of care by destabilising the local treatment system, and clinicians have expressed concerns about patient safety during a rushed and poorly planned handover process to a new provider.

Certainly this problem is not unique to addiction treatment. The BMA has for some time raised concerns about the destabilisation of health care with the growing influence of independent sector providers in acute care.[2,3] The same concerns about quality of care, distortion of case mix (with more serious cases being managed by the NHS), loss of training and staff from the NHS are apparent across a wide range of medical specialties. Further the recent failings identified in Mid Staffordshire highlight the negative impact on standards when care is driven by financial imperatives.[4] A report on the Mid Staffordshire affair highlighted that, to avoid similar cases in the future, "all clinicians must speak up for patients when they witness poor quality care. It is our overarching duty."[5] This must surely also apply to the impact of questionable commissioning practices.

So what of the future? The Department of Health's World Class Commissioning envisions a brave new NHS in which "clinical leadership and involvement is a critical and integral part of the commissioning process. World class commissioners will need to ensure demonstrable clinical leadership and engagement at all stages in the commissioning process. Clinicians are best placed to advise and lead on issues relating to clinical quality and effectiveness." Further, "world class commissioning will ensure that the greatest priority is placed on those whose needs are greatest." It is also proposed that "commissioners will need to manage their relationships and contracts with providers….This will involve working closely with providers to sustain and improve provision, engaging in constructive performance discussions to ensure continuous improvement." While much of this is somewhat aspirational and couched in management clichés, one could not disagree with the sentiments. And if these aspirations are realised it could lead to a welcome new era of co-operation between commissioners and providers to improve the quality of care we provide.

SCAN has brought the concerns identified in its survey to the attention of the Addictions Faculty of the Royal College of Psychiatrists in May, and will be submitting a final report to the National Treatment Agency and the Department of Health for their consideration. We would hope that these concerns are taken seriously and that lessons have been learned from failure to address clinical concerns in other parts of the NHS.

Professor Colin Drummond is SCAN Lead

REFERENCES

1. **Measley, R. (2005) Tenderisation of Hackworth. St Hilda's, episode 6. SCANbites, Winter, 18-19.**
2. **Kmietowicz, Z. (2006) Non-NHS treatment centres are detrimental to local health services, finds a BMA survey. BMJ, 332, 10.**
3. **Delamothe, T. (2009) The problem with ISTCs. BMJ, 338, 1863.**
4. **Klein, R. (2009) Safeguarding NHS standards. BMJ, 338, 1958.**
5. **Colin-Thome, D. (2009) Mid Staffordshire NHS Foundation Trust: a review of lessons learnt from commissioners and performance managers following the Healthcare Commission investigation. London, Department of Health.**

Prescient? SCANbites issue 6, Winter 2005

ST HILDA'S
St Hilda's
Substance Misuse Service
NHS
"Putting St Hilda's Integrated Trust at the heart of the NHS"
Episode 6. TENDERISATION OF HACKWORTH by Reg Measley, freelance writer

...years and counting: still addicted to the job?

Sanju George, Ravi Pullical and Kudlur Swamy

Three addiction psychiatrists, consultants for between two and three years, share their thoughts on key issues relating to their day-to-day work. They have tried to paint an on-the-ground picture of what it is like to work as a consultant in addiction psychiatry and, with a realistic portrayal, hope to help those considering a career in addiction psychiatry.

Dr Sanju George, consultant and senior research fellow in addiction psychiatry, and honorary senior lecturer in psychiatry, Birmingham and Solihull Mental Health NHS Foundation Trust, and University of Birmingham Trust

Dr P N Ravindranath, consultant psychiatrist in addiction Dudley and Walsall Mental Health Partnership NHS Trust.

Dr Nirvanaswamy Kudlur Chandrappa, consultant in addiction psychiatry, Worcestershire Mental Health Partnership NHS Trust.

"A challenge is an opportunity in disguise" according to management guru John Adair and there is no shortage of opportunities in addiction psychiatry.

We chose addiction psychiatry because...

SG: During my training, I saw the immense potential addiction psychiatry offered: primarily, the opportunity it presented to make a substantial difference to patients' and families' lives. Being a relatively 'new' speciality, other attractions for me were the scope to set up and develop treatment programmes and services, and the many unknowns that would lend well to research.

RP: The exciting challenge that addiction psychiatry offered, given the diverse range of social, physical and mental health problems our patients present, was what attracted me. Addiction psychiatry offered a genuine opportunity to work in a truly holistic manner with patients through the various stages of their addiction careers, employing various treatment interventions, and to see clients transform their lives.

KS: I was fascinated by two facets of addiction: the neurobiological correlates of addictive disorders and the emerging evidence base supporting various psychological therapies. Addiction psychiatry's heavy emphasis on the biopsychosocial model and its scope to work in partnership with other agencies especially attracted me. It also offered me the opportunity to do patient-friendly research.

Our main challenges

SG: The greatest challenge came with the transition from registrar to consultant: having to be and being seen as a leader who has all the answers. Addiction psychiatry also requires extensive multi-disciplinary and inter-agency partnership work with other service providers and commissioners. Also, an uncertain future due to the commissioning vagaries of drug and alcohol services continues to pose a serious challenge.

RP: Two significant ones. First, new commissioning arrangements driven by economic market forces at the expense of vulnerable patients' needs. Second, having to overcome the misperception of addiction as not a medical speciality, in the eyes of the public and some of our colleagues, who consider it a self-inflicted problem.

KS: Over the past two years my greatest challenges have been: the ever-changing targets set by policy makers and/or local commissioning bodies; a switch from a harm reduction agenda to a treatment effectiveness agenda; having to constantly justify the value of our speciality and its existence as compared to cheaper options – and the need to get patients out of the treatment system with limited resources.

What we enjoy the most

SG: Being a full-time clinician, I enjoy my clinical work the most – i.e. time spent with patients and their families. I run a carers' clinic – a support group for carers, and this has been immensely gratifying. I also enjoy setting up and/or developing services.

RP: Direct patient contact and seeing the benefits that treatment can bring not only to the patient but also to the family and wider community. It is particularly rewarding to see patients regarding the clinicians as their first stable attachment, given the neglect and rejection they have experienced in their lives, and patients trying hard to make changes.

KS: Nothing is more rewarding than seeing patients benefit from treatment, achieve their life goals and make fuller contributions to society. Outside my clinical work, I teach various professional groups and lay public.

What we enjoy the least

SG: Meetings, meetings and more meetings: an unavoidable part of a consultant's job. I feel particularly frustrated at having to work within an almost exclusively target-driven 'climate': especially when clinical care is overlooked in favour of centrally-dictated priorities, often decided by non-clinical academics.

RP: I find it very de-motivating taking part in various stakeholder meetings, especially those discussing re-organisation and re-configuration of services: sadly, the focus doesn't seem to be on improving clinical effectiveness, and all this seems to result in is the de-stabilisation of the treatment system. Equally frustrating are the frequent demands to prove that we are providing a cost-effective service and the fact that we have very little influence on the various aspects of service delivery.

KS: The enforced need to be thinking merely of cost-saving initiatives yet promising effective treatments and being refused funding for service development initiatives. Quality seems to be compromised in favour of quantity. How can patients be seen as mere numbers and only contributing to targets? Working within these limitations and yet maintaining staff morale has been draining.

Our advice to trainees considering a career in addiction psychiatry...

SG: Addiction psychiatry is a growing speciality with immense scope: from service development, treatment and research perspectives. Trainees should try and gain as much experience in management and leadership – not merely by attending courses but from 'hands–on' projects. All the above ought to be seen within the context of drug and alcohol services' commissioning uncertainties that the future may hold.

RP: Do get direct work experience of working within an addiction service and understand how different it is from other psychiatric sub-specialities. Don't be put off by the perceived stigma surrounding it; the job can bring you immense satisfaction from your day-to-day clinical work and I would definitely recommend it as a rewarding career.

KS: Trainees need to be exposed more to, and be better equipped in, management skills, interagency working, and understanding commissioning of addiction services. Targets in addiction psychiatry are here to stay and trainees need to see all sides of such a target-driven system. An in–depth conceptual understanding of clinical governance and its translation in practice is imperative. Overall, as a career choice addiction psychiatry offers more opportunities than most.

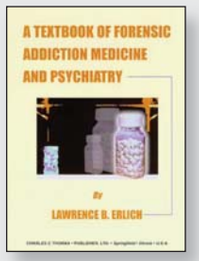
BOOK REVIEW

A review of the Textbook of Forensic Addiction Medicine and Psychiatry by Lawrence B Erlich

Aideen O'Kane

"This book is a beginning", acknowledges the author, Dr. Lawrence B. Erlich. The author offers his book as "the first attempt to bring all the relevant information to the practice of forensic addiction psychiatry and medicine together in one place".

He describes himself as a forensic addiction specialist, which leads us to assume this is a



recognised subspecialty in the US. This book covers a wide variety of clinical and legal topics in an unconventional order. Nevertheless I found it an interesting read, first to see the breadth of clinical scenarios the forensic addiction specialist in the US encounters, and second to acknowledge how similar this practice seems to the usual work of the addiction psychiatrist in the UK. So should we be more proactive about detailing our forensic work?

The book covers a wide range of topics in a brief and easily read format, although none is covered in any great detail. They can be broadly divided into three areas although they are not necessarily ordered in this way in the book:

- *Legal issues.* "A layman's view of the law" gives a simple overview of the legal system, such as the difference between criminal and civil law and the standard of proof required in such cases. The material is covered in a simple way, perhaps too simple for the title "textbook". A chapter on the expert witness outlines the difference in culture between the legal system and medicine. The specialist choosing to involve themselves in regular legal work needs to accept these different cultures. "What seems logical to the court may not be the answer in medicine". Specific chapters on civil and criminal law and the types of cases on which a psychiatrist may be asked for an opinion are outlined.
- *Background medical/psychiatric knowledge.* Chapters on definitions of psychiatric classification systems, drugs of abuse, and neurotransmitters.
- *Chapters on different types of clinical case which frequently interface with the law.* These are presented with clinical scenarios to illustrate some of the complex legal management issues.

Many of the clinical case types discussed, including the drug courts, impaired physicians, child custody cases, behavioural addictions and prison psychiatry are very much the day-to-day work of the addiction psychiatrist in this country. In his chapter on "addictions and the criminal law" were cases questioning the mental state of a defendant at the time of a serious crime. These generally fall to the expertise of forensic psychiatrists in this country. Of particular significance is that he emphasises repeatedly the degree to which addiction problems are minimised both by lawyers and psychiatrists in such cases in the courts. He rightly raises the issue of the importance of a thorough understanding of addictions in all psychiatric cases involving the law. He describes himself as accredited in forensic psychiatry and also in addictions, emphasising the need for expertise in mental health law as well as addictions to provide expert advice in this area.

The book is written for an American audience, so applicability must be interpreted with caution. For a textbook, there is too much subjectivity and personal experience interspersed throughout, and at times scenarios are repeated.

The odd ordering sees pain management/ADHD and obesity described in the same chapter on the basis that that their respective treatments potentially all cause addiction problems. Whereas treatment of obesity in the US (he says) is largely with amphetamines, hopefully this is not the case here! Similarly, military/prison and sports psychiatry are discussed together because of the regulatory authority conflict encountered in the management of such cases.

It is not clear who the intended audience is. There are chapters on basic pharmacology of neurotransmitters and drugs of abuse, along with psychiatric diagnostic classifications, which are unlikely to be of interest to the experienced forensic addiction expert witness. The legal chapters provide an interesting overview but as specialists working in the legal arena I fear we require more detail.

In conclusion, Dr Erlich states that one of the main reasons for writing this book was to emphasise the unique position of the forensic addiction specialist. In some ways this has been achieved. For the addiction specialist it is an easy read which highlights the diverse skills addiction training can bring. Would one recommend it as an essential textbook for the UK addiction trainee? Sadly, probably not.

■ Elrich, L. B. (2001) *Textbook of Forensic Addiction Medicine.* C. C. Thomas: Springfield, Illinois

Dr Aideen O'Kane, SCAN Trainee and specialist registrar, Northumberland, Tyne and Wear NHS Mental Health Trust

New case law and addiction: diminishing responsibilities?

Sally Braithwaite

The statistic that approximately 50% of violent and property offences are committed after drugs or alcohol have been consumed[1] will not be a dramatic revelation to most addiction clinicians. However, the issues surrounding intoxication, alcohol or drug dependence and the possible consideration of a legal defence for defendants charged with 'specific intent' crimes where the 'mens rea', or the purposeful intention to harm, is an important factor are potentially complex.[1]

There have been recent developments in English case law regarding defendants who put forward a plea of diminished responsibility by virtue of their diagnosis of alcohol dependence in proceedings where they have been charged with murder, a crime requiring 'specific intent'.[2]

To explain, English law distinguishes between crimes that require a 'specific intent', such as murder, burglary, deception, and handling stolen goods, and those which require only 'basic intent' such as manslaughter, rape, malicious wounding and false imprisonment.

The distinctions between specific and basic intent are not based on any established legal test but appear to have been originally created by the English legal system out of a desire to be balanced and to give the courts some flexibility in determining whether the mental state of the defendant suffices for the severity of the crime.[3] Interestingly, Scottish law attributes much less importance to the concept of 'mens rea' than in the English and Welsh system and most Scottish criminal charges are not concerned with the intent of the defendant but with harm caused.

However, the mental health defence of diminished responsibility, under section 2 of the Homicide Act 1957, is available only for the charge of murder. Further, the insanity defence as defined by the McNaughton rules (1943), is another mental health defence to murder and could potentially be invoked in cases of alcohol dependence where there is evidence of mental illness such as delirium tremens or alcoholic psychosis. There are three legal elements to the diminished responsibility defence:

1. That the accused was suffering from an abnormality of mind at the time
2. That this arose from a) a condition of arrested or retarded development or b) inherent causes or c) the result of disease or injury
3. That it substantially impaired his mental responsibility on such acts as willpower, perception and judgement

Previously, alcohol dependence could fall within a defence of diminished responsibility as a disease or injury if significant cerebral damage could be found to the extent that there was evidence of gross impairment of judgment and emotional responses. Physical investigations such as neuro-imaging, EEG and psychometric testing were par for the course in these cases. If alcohol dependence had not led to discernable brain damage, the diminished responsibility defence may still have been available if the drinking could be shown to have been involuntary or unable to be resisted. However, previous case law had imposed strict criteria on defining this involuntary consumption by creating a 'first drink of the day' test where it was necessary to show that the first drink of the day had been involuntary and the accused was unable to resist the impulse to drink.[4]

One of the cases that defined this was R v Tandy where the accused was an alcohol dependent woman, Tandy, who had strangled her 11-year-old daughter whilst intoxicated following a day of unusually heavy drinking. On a charge of murder she put forward the defence of diminished responsibility by reason of her alcohol dependence and that the craving she had had for that first drink was enough to produce an abnormality of mind. Although the Court of Appeal accepted that Tandy was alcohol dependent, but with no significant brain damage, and that some of her consumption of alcohol on that day was involuntary, she was later convicted of murder as it was deemed that she could have resisted the impulse to consume the first drink of alcohol on that fateful day.[5]

However, there was a landmark judgement of the Court of Appeal in R v Clive Wood on 20 June 2008 and 2 April 2009 in another case of a killing by an intoxicated, alcohol dependent man, Clive Wood, who was neither overtly brain damaged nor drinking wholly involuntarily on the fatal day in question. Sir Igor Judge, giving the lead judgement, indicated that the conclusions drawn in R v Tandy had to be reassessed. He stated that the jury needed to decide in these cases not on whether or not brain damage had occurred, nor the effect of any voluntarily consumed alcohol, but whether the "defendant's syndrome was of such an extent and nature that it constituted an abnormality of mind induced by disease or illness".[6] Wood's original conviction of murder was later reduced to manslaughter.[7]

Conclusions

This judgement of the Court of Appeal represents a significant development for clinicians. The judge recognised alcohol dependence as a basis in itself to arrive at a finding of diminished responsibility without the need for establishing consistent involuntary intoxication or discernable brain damage.

Given the high prevalence of alcohol dependence in people convicted of murder, addiction psychiatrists may be increasingly called upon to give evidence. The extent to which this new case law may be extended to other cases where there is a question of 'intent' remains to be seen. But it seems a logical extension of this legal principle.

REFERENCES

1 Haque Q., Cumming I. Intoxication and Legal Defences. 2003 Advances in Psychiatric Treatment 9, 144-151.
2 R v Clive Wood 2008 EWCA Crim 1305
3 Smith J.C. & Hogan B. 1996 Criminal Law (8th Ed) 221-223. London Butterworths.
4 R v Tandy 1988 Crim LR 308
5 R v Tandy 1989 1 All ER 267.CA
6 R v Wood 2008 EWCA Crim 1305 2008 WLR (D) 204 lawreports.co.uk/WLRD/2008/CACrim/jun0.1.htm
7 R v Wood (No 2) 2009 EWCA Crim 651; 2009 WLR (D) 125 lawreports.co.uk/WRLD/2009/CACrim/Apr0.2.html

Dr Sally Braithwaite, SCAN policy advisor and consultant addiction psychiatrist, Surrey and Borders Partnership Mental Health NHS Trust

From the road to ruin to the route to recovery

Frank Ryan

ROUTES TO RECOVERY is the banner under which the NTA has published a range of materials bearing on psychosocial interventions for drug misuse and allied mental health problems. This worthy project stems largely from recent developments such as the production in 2007 of the National Institute for Health and Clinical Excellence (NICE) guidance on psychosocial interventions for drug dependence and opioid detoxification[1]. Routes to Recovery emerges as a multi-media collection of documents and slideshows that outlines the evidence, the tools, the skills and the governance framework to "psycho-socialise" drug treatment interventions. Clinicians, service user representatives, managers and commissioners will find these resources essential reading. Here, I will provide a brief navigational and evaluative guide.

Where to start

A good place to start when visiting the website is Psychosocial interventions in drug misuse: a framework and toolkit for implementing NICE-recommended treatment interventions. I must declare an interest at this point as I served on the advisory panel. That said, I think it would be helpful to give this top billing in the website, as it is the empirical platform for much of the featured resources. It includes classification of the psychosocial interventions using a stepped care framework and specification of core competencies. In addition, there is guidance on training, supervision, protocols, audit tools and quality assurance. Table 1, adapted from one of my own teaching slides, outlines the key interventions. The expectation is that the "low-intensity" interventions such as motivational interviewing will be routinely used by all staff, but the more intense "stepped-up" interventions will be the responsibility of specialist psychological therapists, usually clinical or counselling psychologists. The latter will also be key to supervision and quality control.

The International Treatment Effectiveness Project (ITEP)

ITEP is an import from our colleagues in the USA and is given top billing on the website. If the Toolkit provides the framework, instruments and measures, the "Node Link Mapping" manuals and the Psychosocial Interventions Resource Library reviewed below provide more specific guidance on how to use these tools, as well as introducing new ones. The ITEP package promotes the use of visual mapping as a means of charting the interacting current concerns presented to workers in drug treatment contexts. It is largely derived from cognitive behaviour therapy (CBT) with some motivational interviewing (MI) techniques blended in. However, some of the more advanced techniques (identifying and modifying "mindtraps" or negative core beliefs) would certainly require advanced competencies in CBT. Sensibly, the NTA has piloted this innovative technique in a number of regions in England. Preliminary findings indicate good levels of acceptance and adoption of these techniques at the pilot sites. In advance of the final reports it is perhaps premature to evaluate this further.

The Psychosocial Intervention Resource Library (PIRL)

This is an extensive collection of protocols, therapy manuals and implementation guidelines covering a range of approaches including CBT, MI and mindfulness practice. The materials are also classified by substance (e.g. alcohol or cocaine) and client group (e.g. young people or parents). The resources are additionally categorised by their evidential status. Thus, Group 1 is evidence based, such as the NICE (2007) guidance and Group 2 resources are based on expert consensus on good practice, such as ITEP. This is an invaluable resource that brings evidence based psychological therapy a step closer to those best placed to use it, the keyworkers, and those who stand to benefit, the service users.

Where do we go from here?

Ultimately, the impact of the suite of guidance that constitutes the Routes to Recovery will depend on the degree to which the interventions and competencies are adopted and utilised. The instigators of some of the approaches described do not underestimate this challenge. For example, Dansereau and Dees[2] found markedly different levels of post-training adoption. In a follow-up survey, between 24% and 87% of two cohorts of trainees reported using mapping several weeks after training.

However, nearly half of all trainees did not return questionnaires so we assume that the non-responders did not adopt mapping.

In conclusion, Routes to Recovery promises much in alleviating the harms linked to drug misuse, given the right implementation strategy. Looking forward, it appears to me that three factors will influence the ultimate impact of these pathways to recovery. First, the degree of organisational leadership, including the resolve of commissioning partners to invest in equipping the workforce with the requisite competencies. Second, the availability and quality of the training: skills do not share themselves; they have to be taught. Third, the effectiveness and endurance of supervision and quality control.

Table 1 Stepped care for drug misuse and common mental health problems

	Low Intensity Interventions	High Intensity Interventions
Management of Drug misuse	Motivational interventions Contingency Management	Behavioural couples therapy
Management of Common Mental Health Problems	CBT by guided self-help Behavioural activation	CBT for depression

REFERENCES

1 National Institute for Health and Clinical Excellence (2007) Drug Misuse: Psychosocial Interventions (CG51); Drug Misuse: Opioid Detoxification (CG52);

2 Dansereau, D.F. & Dees, S.M. (2002) Mapping training: the transfer of cognitive technology for improving counselling. Journal of Substance Misuse Treatment. 4, pp. 219-230.

Dr Frank Ryan is a Consultant Clinical Psychologist at Central and North West London NHS Foundation Trust and an Honorary Senior Lecturer, Deptartment of Neurosciences and Mental Health, Imperial College, London.

• Frank will be facilitating a training workshop – *Motivation and change: Cognitive Behaviour Therapy applied to addiction* – at the annual meeting of the European Association of Behavioural and Cognitive Therapy, in Dobrovnik, Croatia, on 16-19 September.

SCANinterview

Addiction biology gains a new professor

An interview with Professor Anne Lingford-Hughes

Anne Lingford-Hughes has recently returned to London as Professor of Addiction Biology at Imperial College. She has for many years been studying the psychopharmacology of addiction with particular expertise in neuroimaging. Amy Wolstenholme interviews her on her career and plans for the future.

AW: How did you get into the addictions field and who were your major influences when you were training?

AL-H: After completing my preclinical training, I deferred my clinical training to do my PhD and then a post doc at the US National Institutes of Health, where the wards were next to the labs. It was here that I became intrigued by psychiatry and really saw the value of joint-training and the translational approach. So I returned to the UK and completed my clinical training, five or six years later than my peers, and started my psychiatry training at the Maudsley.

Given I had no specific interest in addiction at that time, my first job was as a locum on the drug dependency unit where Ilana Crome was the Consultant. My first interest in how alcohol affects the brain came from research at NIH in the mid 80s, when the GABA-benzodiazepine receptor had just been sequenced. I was part of the group looking at modulators of this receptor system, which included alcohol. I became aware that there was a very good SPET tracer to image the benzodiazepine system, and I thought that it could ideally be applied to studying alcoholism.

Rob Kerwin had a major influence on my career development and guided me towards applying as an SHO for a Wellcome training fellowship to look at the benzodiazepine receptor in alcoholism. He sadly died in 2007, but he mentored many junior people who have gone on to develop significant careers. Without his guidance and direction it is very unlikely that I would have achieved as much as I have.

Since I wanted to study alcoholism, I stopped Jane Marshall in the corridor, introduced myself, and asked if I could scan her patients, which was a bit cheeky in retrospect, but thankfully she said yes! I value her support and advice to this day.

Finally of course, David Nutt, whom I first met when I was an undergraduate and he was a lecturer at Oxford. Since 1998 we have worked closely as part of a large team examining the neurobiology of alcohol and opiate addiction and now form a new Dept at Imperial College.

What does biological psychiatry have to offer the addictions field? More specifically what can we hope to learn from neuroimaging over the coming years?

Biological psychiatry gives a framework to understand vulnerability to substance use and misuse as well as treatment. If we can understand the interaction between the brain, drugs and, the environment and how genetics also play a role, I believe we can then start to understand what are the best prevention and treatment strategies.

Of course it is not all about pure pharmacology, since many psychological or environmental approaches have been shown to have profound effects on brain neurochemistry. My main interest is in pharmacology so I use PET and SPET because you can actually label receptors or neurotransmitter systems, depending on what tracers are available. Now that we're getting closer to characterising some systems, the challenge is to work out how treatment can impact on this neurobiology. One example of how neuroimaging has impacted on our current thinking is to highlight the key role played by the orbitofrontal cortex.

What have been your main research findings and how do they relate to clinical practice?

Any findings reflect the team involved in neuroimaging. We're a way off relating to routine clinical practice, but we are trying to understand some of the underlying neurobiology and also to get people to question some of the dogma.

I've spent most of my career imaging the GABA-benzodiazepine system with colleagues and we have shown there are reduced levels in the brain in alcoholism, which seem to be differently distributed in men than women. It seems that alcoholics have reduced sensitivity of this receptor, which may link to their sleep problems. By developing new PET traces we've been able to image the alpha 5 subtype typically expressed in the limbic region, including the hippocampus, and have shown in alcoholics the level of that receptor subtype is linked to memory performance. We have tried to push forward the understanding of how this key receptor may not only be involved in vulnerability to alcoholism but also how it may mediate some of the detrimental effects of alcohol.

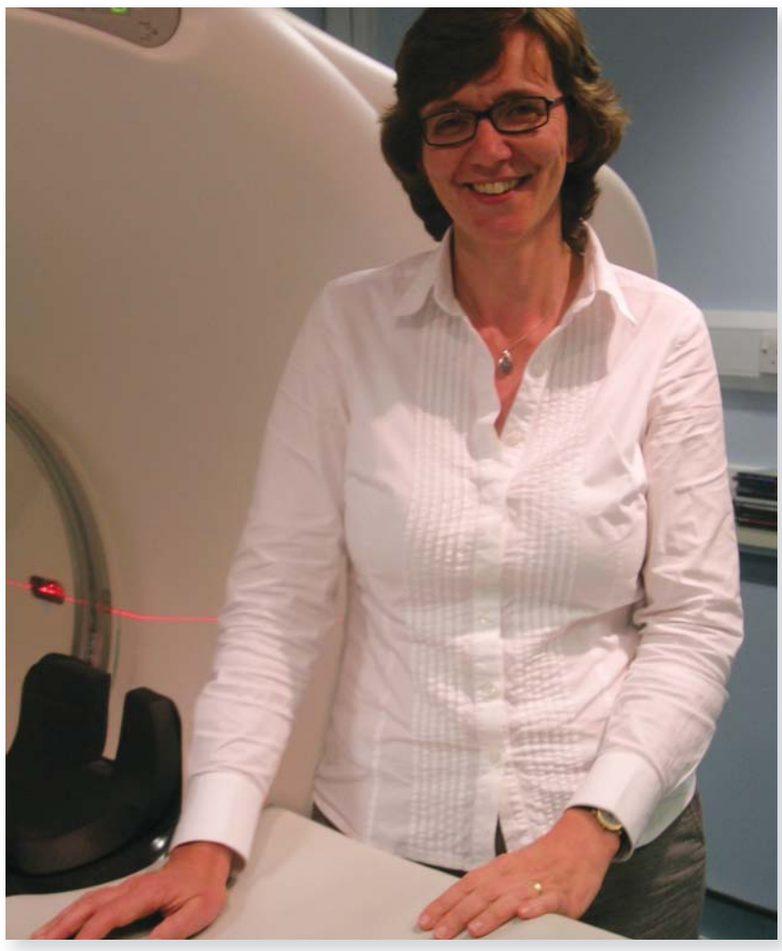
Other findings are from our study looking at the dopamine system which has challenged some traditional views since we cannot show that heroin releases dopamine in addicts. Alongside other evidence, such findings, I hope make people think again and to relook at fundamental hypotheses in addiction. One of my slight bugbears is that often in preclinical literature, animal experiments with cocaine or amphetamines are taken to represent addiction, whereas of course, drugs like heroin and alcohol interact much more subtly with the dopamine system.

What do you think will come of the new MRC initiative in addiction research?

A lot! And the HTA have also announced a specific call for alcohol misuse, so it is exciting to have two big funding streams specifically looking at addiction, and particularly alcohol. The MRC initiative has started to bring groups together and bring new people into the field. I collaborate with Graeme Henderson in Bristol, a preclinical pharmacologist who knows a huge amount about mu opioid receptor pharmacology but primarily from an analgesia perspective. Hopefully bigger projects will start to grow from the range of pilot studies in the first call.

BAP has been a key organisation in your career, and you have had many leading roles in developing guidelines in addiction. Can you tell us more about your work with the BAP, and how effective you think guidelines can be?

BAP for me is key because it brings together pre-clinical and clinical scientists interested in pharmacology and I have been very fortunate to meet key people who have become colleagues. The staff in the Cambridge office have become



"Things look very positive and exciting... we are building on strong foundations"

friends and look after people at BAP events exceptionally well.

Through the BAP I have been part of setting up various initiatives such as the masterclasses, a refresher for Consultants allowing them to get updates in pharmacology from the experts involved in developing guidelines and determining UK policy. I also co-organise with colleagues in Manchester, a specialist module in pharmacology of substance misuse. Finally, the BAP substance misuse guidelines which were published in 2004, were the first of their kind in the UK, whereas now there is a wealth of NICE guidelines as well as the updated Orange book. We will be revising them in the next year.

You have been leading alcohol services in Bristol since 2000. What has been your experience of this and what do you see as the future of alcohol treatment?
I was the 'leader' or Consultant, but I was not alone and I am indebted to the team, particularly the manager, for how much they all taught me. At times I answered telephones and gave out the bus fares, which gave me lots of patient contact . Having just moved away, I miss them greatly, as I do their User group. I have tremendous respect for anybody who works in alcohol services due the chronic under-resourcing given the amount of people with alcohol problems. Until recently there have not been direct or clear commissioning arrangements which makes the services very heterogeneous throughout the country. Whilst new money may be on the way, it is not clear how effectively that will flow.

I think some of the challenges now as a consultant are what our role is in 'new ways of working', and within in the new managerial structure – probably when that all beds down there will be another change! Juggling the demands of a busy clinical service with expectations of the university and an academic career can also be challenging, but I think that it's vital to continue to see patients while working in research.

Academic medicine is a particularly challenging career for women. What advice would you have for women seeking an academic career in our field and how do you manage to achieve a work-life balance?
I am often either the only woman or one of very few sitting around a table, with the exception of addiction psychiatry! I was the first and only girl at a boys' school because I failed to get into medical school, and went back and re-did my entrance exam, so an all-male environment is not something that I feel particularly uncomfortable with. But I feel women often have a different way of looking at a problem and my impression is that we can be more interested in the process of getting to the solution as in achieving the end point itself. I would hope I have got where I am because of my academic credentials not because I am the token woman.

I am not sure I do manage a work-life balance, but there are key things such as having a fantastic, supportive husband, and 4-year-old daughter who brings you down to earth to what is important in her life, such as her pink shoes! In many ways my work is my life in that I enjoy what I do and it has given me tremendous opportunities.

I do value my holidays and my time out, but would acknowledge I have invested many hours in work, which is no different to a lot of people. I have been very lucky with the support I have had as well as with opportunities. I try to make technology work for me, so by enabling work outside the traditional nine to five, it means I can still go and see my daughter sing "chick-chick-chick-chick-chicken…" at the Easter concert, whilst managing to get my work done. The flexibility and the freedom, both intellectually and time-wise, balances out the tougher times of an academic career.

You have recently moved to a new Chair in Addiction Biology. What are you hoping to achieve in your new role and what opportunities does this open up for you?
In many ways it's been like coming home, and I've had a fantastic welcome. I've done my imaging in the Hammersmith hospital site for the last 10 years so I now have more time to develop progammes here.

In addition to building a team within Imperial College and CNWL NHS Foundation Trust, I hope to bring possibilities of research to trainees and other staff of any discipline, and also to facilitate research from the ground-up so that ideas/questions from Users or staff get heard. If I can do anything to facilitate their research ideas or help them formulate their plans and get money, I will. Things are looking very positive and exciting and the combination of Imperial and CNWL NHS Foundation Trust offers immense opportunities - we are building on strong foundations.

Thank you and good luck in the new job.

"I have tremendous respect for anybody who works in alcohol services."

TOP for alcohol services - topping, toppling or just plain over the top?

Filippo Passetti and Ken Checinski

Drug services are required to complete the Treatment Outcomes Profile (TOP) on all service users, with the imperative that their funding will soon depend on it.

Recently, some commissioners have included this stipulation also in service level agreements for dedicated alcohol services. It is perhaps natural to feel a sense of familiarity with TOP and simply accept it in one's clinical day routine. But is it appropriate to introduce TOP into an area, alien from that where it was developed?

Like a fine wine, the big question is whether or not it travels well. If not, TOP may become a staple part of the diet shared between services and their commissioners. The consequences may be contempt for TOP and undermining of the often difficult marriage between commissioners and providers, not to mention potentially perverse implications for the way treatment is delivered and alcohol services are commissioned.

Topping

TOP was developed out of the Maudsley Assessment Profile[1] for the National Treatment Outcome Research Study. It was commissioned by the NTA for drug services across the country and has an emphasis on the public health concerns associated with drug addiction, e.g. drug-related crime and blood borne virus infections.

It is also validated to detect changes in alcohol use, which is common among users of drug services, chiefly by comparison with the Time Line Follow-Back method.[2] Appropriately, TOP is biased towards monitoring addiction treatment in specific groups and settings, namely opiate users receiving a substitute prescription within the NHS and non-statutory services. The crucial question then is: is the alcohol case similar enough to this prototype?

Toppling

There are a number of key differences between drug and alcohol treatment. In the treatment of opiate dependence it is reasonable to expect that treatment should follow a fairly smooth, gradual progression from daily use of illicit drugs, to less frequent use, and to only rare use (thus being suitable for the regular monitoring prescribed by the TOP manual), as substitute opiate prescription is titrated to objectively assessed needs and as engagement with services progresses. Sadly, this model seldom holds true for alcohol treatment.

Alcohol service users will often progress to sustained abstinence along a winding path of withdrawal and relapse, where progression from heavy use to abstinence to relapse can occur over a short period of time. The accuracy of reporting also differentiates alcohol and drug treatment. Drug users are generally very good at estimating their use of illicit substances, because their procurement is a salient, discrete event.

In contrast, with the exception of very severely dependent individuals, whose drinking has become highly stereotyped, alcohol consumption is difficult to estimate, because alcohol is easier to procure, stock and be offered by others. Other differences between primary alcohol users and drug users include: different age of first presentation, different harms, and differences in access to inpatient and rehabilitation treatment, including the way in which services determine the most appropriate timing for this.

Over the Top

In light of these considerations, the argument for a straight introduction of TOP, untranslated, into alcohol treatment outcome monitoring seems at the very least misguided. There is simply too much in it that is redundant or plainly irrelevant to alcohol treatment.

The attraction of a single outcome measurement approach across the chemical addictions is obvious, but simply asserting that TOP is sensitive to change in alcohol use does not make it a valid, overarching outcome tool. In this respect, the apologia by Marsden et al[3] is unconvincing as it did not pick out the particular areas of alcohol-specific harms and treatment journeys. Marsden suggests (personal communication, 2008) that agencies may collect additional information to capture these alcohol-specific aspects of treatment (e.g. DrInC).[4] But why should TOP then remain part of this exercise, if it neither properly captures alcohol treatment outcomes nor does it make its monitoring comparable with that of drug treatment?

How to be TOP

Trying to compare alcohol with drug outcomes using TOP is like juggling with one arm tied behind your back. What are the alternatives then? The first, immediate answer is simple, and could equally apply to both alcohol and drug treatment. If there are identifiable aspects of treatment delivery that can be agreed upon as defining treatment excellence (and, arguably, there are, for both alcohol and drug problems), then those could be all that need monitoring.

A second answer applies specifically to alcohol treatment. In contrast to drug treatment, which has a comparatively short history of research into the reasons and pitfalls of outcome monitoring, there is a wealth of literature for alcohol. Examples include validated questionnaires on alcohol dependence and its consequences (SADQ, APQ), questionnaires on motivation (e.g. SOCRATES), and objective biological measures to corroborate subjective reports (BrAL, LFT, MCV, CDT). The Alcohol Problems Questionnaire is simple and has much to commend it; not least that it "is the instrument of choice for the measurement of alcohol related problems in the UK".[5] This literature must not be forgotten if we are to avoid the risk of dumbing down alcohol treatment (potentially affecting future alcohol funding streams).

In summary, it is a paradox that alcohol treatment should borrow its outcome monitoring from drug treatment, when it has so much more to offer. Accepting an imposition of misguided outcome targets may mean that we end up chasing leprechauns – outcomes not relevant to outcome, which may serve to destabilise services and degrade treatment.

Conflicts of interest: none.

REFERENCES

1. Marsden J., Gossop M., Stewart D., Best D., Farrell M., Lehmann P., Edwards C. & Strang J. (1999) The Maudsley Addiction Profile (MAP): a brief instrument for assessing treatment outcome, Addiction 93 (12), pp. 1857–1867.
2. Sobell, L.C., & Sobell, M.B. (1992) Timeline followback: A technique for assessing self-reported alcohol consumption. In R.Z. Litten & J. Allen (Eds.), Measuring alcohol consumption: Psychosocial and biological methods (pp. 41-72). New Jersey: Humana Press.
3. Marsden J., Farrell M., Bradbury C., Dale-Perera A., Eastwood B., Roxburgh M., & Taylor S. (2008) Development of the Treatment Outcomes Profile. Addiction 103 (9), pp. 1450–1460.
4. Miller, W.R., Tonigan, J.S. & Longabaugh, R. (1995) The Drinker Inventory of Consequences (DrInC): An Instrument for Assessing Adverse Consequences of Alcohol Abuse. Project MATCH Monograph Series, Vol. 4. DHHS Publication No. 95-3911. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
5. Raistrick D., Heather. N. & Godfrey C. (2006) A Summary of the Review of the Effectiveness of Treatment for Alcohol Problems. London: NTA.

Dr Filippo Passetti, Locum Consultant Psychiatrist, and Dr Ken Checinski, Senior Lecturer in Addictive Behaviour and Honorary Consultant Psychiatrist, St George's University of London

Is Ethyl Glucuronide useful in detecting alcohol consumption?

Martyn Egerton

There are a number of markers to indicate alcohol consumption and the list is increasing. In addition to measuring the concentration of ethanol itself in blood, breath and urine, there are traditional secondary tests (or markers) such as gamma glutamyl transferase, carbohydrate deficient transferrin, and mean corpuscular volume. As all of these tests have limited sensitivity and specificity as diagnostic markers of excessive alcohol consumption, the last 15 years has brought increased interest in the measurement of the metabolites of ethanol and fatty acid indices of ethanol use.

Ethyl Glucuronide: metabolism and excretion

Ethyl glucuronide (EtG) is a minor metabolite of alcohol (ethanol not methanol). Normally between five and 10% of alcohol is excreted unchanged in the breath, sweat and urine. Over 90% of ethanol is metabolised in the liver to acetaldehyde by the enzyme alcohol dehydrogenase and then to acetate and finally to carbon dioxide.

There are other less significant metabolic pathways, one of which uses the enzyme uridine diphosphate-glucuronyl transferase (UDPG) to link ethanol to glucose to form ethyl glucuronide. EtG is a stable, water soluble compound that is mostly cleared by the kidney. Less than 1% of ethanol is excreted in this way. A similar but unrelated metabolic pathway that links ethanol to sulphate to form ethyl sulphate (EtS) which is also water soluble accounts for a similar proportion of ethanol excretion.

Excretion of EtG is altered by water intake, unlike ethanol itself. The concentration of EtG peaks between two and five hours after alcohol intake but it is detectable for longer than ethanol. EtG may be present in the urine for as long as two to three days after the last alcohol intake and does not accumulate with long term alcohol intake.[1] EtG is deposited in hair, although the mechanism for incorporation into hair is currently unclear. Hair therefore can provide a basis for retrospective evaluation of alcohol use.

Factors affecting EtG concentration

Unlike many other drugs, the deposition of EtG in hair appears to be independent of hair colour although it is still subject to degradation by bleach and to loss by frequent shampooing.[2]

The evidence for a correlation between the concentration of EtG and the amount of alcohol consumed is unclear. The lack of correlation may be in part due to variations in the analytical processes used. Variation in the concentration of EtG in urine or hair between individuals may be partly explained by polymorphism in the UDPG enzyme.

It should be noted that, while EtG appears to be a specific metabolite of ethanol, it has been detected when samples containing alcohol are contaminated with bacteria. It may also be subject to bacterial degradation. The effect of bacterial contamination on other metabolite EtS has not been so thoroughly characterised.

Choice of cut-off point

The choice of cut-off concentration is important in any screening test. A cut-off point that is too low will result in false positive results (drugs reported as present when they are not present, or are present at an insignificant concentration). A cut-off concentration set too high will result in false negative results (drugs reported as 'not found' when they are present at clinically significant concentrations). It is therefore important that the cut-off chosen is appropriate for the setting of the test. In the case of EtG, semiquantitative results are unlikely to be adequate to use EtG as a marker of alcohol use.

Many of the initial studies of EtG in hair used cut-off concentrations of 50 pg/mg. In recent years the limit of detection for analysis of EtG has improved so that now results may be reported as low as 2 pg/mg of hair. This lower limit now means that moderate drinking as well as heavy drinking will give results above the detection limit. Also alcohol is present in a number of pharmaceutical and hygiene preparations as well as certain foods and beverages. The use of lower detection limits requires that incidental exposure to alcohol through these sources must always be considered in the interpretation of EtG results.

Improving precision

More recently it has been shown that fatty acid ethyl esters (FAEE) found in hair provide additional information on alcohol use. Ethyl fatty acids are formed following alcohol consumption and are then incorporated into hair as part of the lipid matrix through sebum. However, like EtG the amount present in hair may be reduced by common hair treatments.

There is some evidence now that a combination of EtG with FAEE, and possibly EtS, may provide a higher predictive value for alcohol consumption than any of the tests used alone. Even when used in combination it is not possible to differentiate between moderate social drinking and heavy alcohol use.[3]

Mass spectrometry technology is becoming widely available, enabling a greater number of laboratories to offer EtG tests. As with any diagnostic test, the testing process must be properly conducted by an accredited institution working under appropriate quality standards, regardless of whether the test →

Mr Martyn Egerton is Consultant Clinical Biochemist, West Park Hospital Epsom and St Helier University Hospitals NHS Trust

→ is conducted in a clinic or performed in a laboratory. The testing process should also be subject to external quality assurance through an accredited External Quality Assessment scheme.

Conclusions

It remains important that EtG or EFFA are not used as a single indicator of alcohol use, but may provide additional evidence on a case-by-case basis. However, given the limitations of EtG as a marker for excessive drinking, described above, due caution needs to be exercised in the interpretation of test results. Further, given the current cost of this test, more research on the reliability and validity of EtG as a marker of excessive drinking is needed before this can be regarded as useful in routine practice. EtG hair testing is being increasingly used in medicolegal contexts as a means of establishing historical alcohol misuse. Again, until more data on validity of this test is available, due caution needs to be exercised in interpretation of the results, particularly when the conclusions may lead to loss of employment, the removal of children, or incarceration for a criminal offence.

REFERENCES

1. Wurst, F.M., Kempter, C., Metzger, J., Seidl, S. & Alt, A. (2000) Ethyl glucuronide: a marker of recent alcohol consumptions with clinical and forensic implications, Alcohol and Alcoholism, 20, 111-116.
2. Wurst, F.M., Wiesbeck, G.A, Metzger, J.W & Weinmann, W.G.M. (2004) On sensitivity, specificity, and the influence of various parameters on ethyl glucuronide levels in urine: results from the WHO/ISBRA study. Alcoholism: Clinical and Experimental Research, 28(8), 1220-1228.
3. Pragst, F. & Yegles, M. (2008) Hair analysis for drug detection, Ther Drug Monit 2008, 255-263.
4. Politi, L., Morini, L., Leone, F. & Polettini, A. (2006) Ethyl glucuronide in hair: is it a reliable marker of chronic high levels of alcohol consumption? Addiction 2006, 101(10), 1408-12.
5. Appenzeller, B.M.R., Schuman, M., Yegles, M. & Wennig, R. (2007) Ethyl glucuronide concentration in hair is not influenced by pigmentation. Alcohol and Alcoholism, 42(4), 326-327.

How to get clinical research

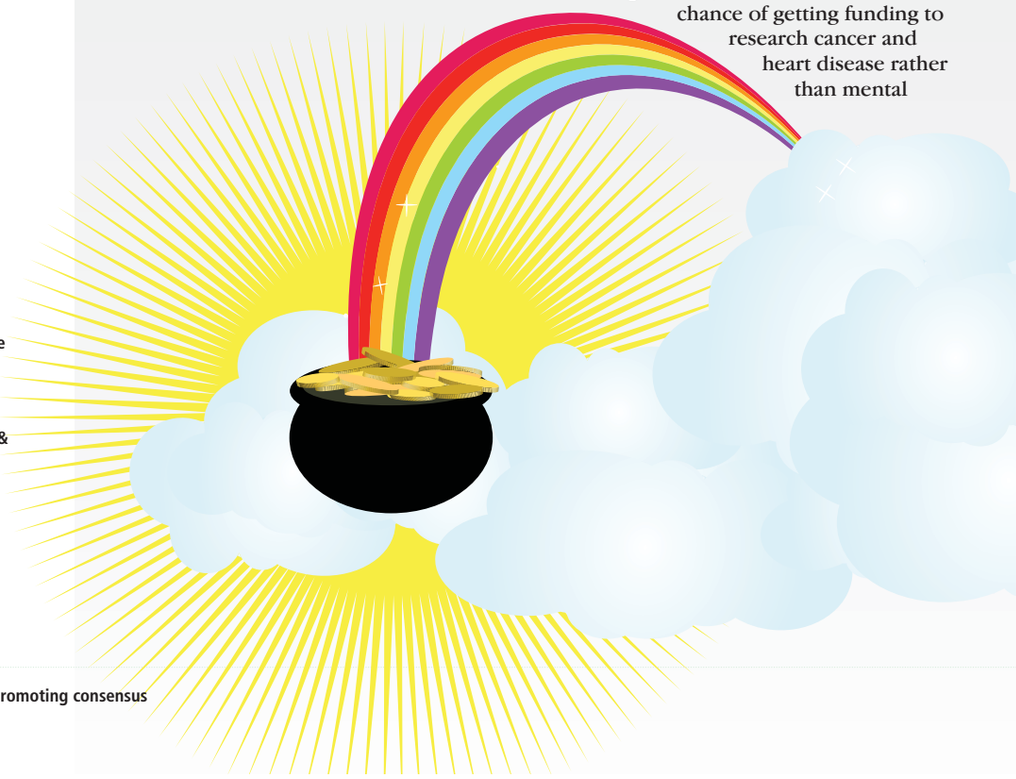
Colin Drummond and Julia Sinclair

While it is possible to do research without funding (apart from your own time of course), it is increasingly difficult for the lone clinician with some good ideas to produce research that is publishable.

There is little point after all in doing research that others will never know about, and publication in a peer-reviewed journal is the standard for achieving that. In recent years the level of sophistication in methodology and the standards required by journals to accept papers for publication has increased dramatically. Journals such as Addiction, which has the highest impact factor in the addiction field, largely use a criterion of research being of 'international significance' as the standard for publication, which rather rules out small local studies even though they would be of a high standard for an MSc dissertation, unless they break some genuinely new ground with wide relevance.

Another problem for the clinician ambitious to do research is that increasingly employers are less flexible about the amount of time that can be spent outside of providing more direct clinical care. Trainees previously had more dedicated time for research and special interests, but this is being gradually eroded with MMC changes. So unless you are in a clinical academic job with significant designated time for research, it is harder to make research happen.

So, for better or worse, getting funding to do research, either to cover your own time or to employ research staff, is really the only way forward. Fortunately there are more opportunities than there used to be to obtain research funding, particularly clinical research, and the main bodies funding research have had a significant increase in government funding. But the news is not all good! Addiction mostly has to compete with all other specialties and disease conditions in medicine, and often one detects an inbuilt prejudice against addiction by funders: typically couched by referees and committees as addicts being 'a difficult population to research' or applications 'not being sufficiently competitive'. Looking at what is being funded, one has a much better chance of getting funding to research cancer and heart disease rather than mental



funded

illness, or schizophrenia or dementia rather than addiction. So anyone seeking funding for research in this field has to work extra hard to make a strong enough case.

Deciding what you want to do

All potentially fundable research has to start with a good idea or question. What makes a good research idea or question is probably a big enough topic for an article in its own right. But in brief, good ideas in clinical research usually arise from an important practical clinical problem. For example, what is the best way to treat X, or is it more cost effective to do Y than Z? Fortunately in terms of making a case for funding, addictions are highly costly to the NHS and to society, and are associated with high levels of morbidity and mortality. Also addiction policy and treatment are currently high on the political agenda. So the case for support, in theory, should not be difficult to make.

Once the 'good idea' or question has been formulated the next crucial step is to make sure no-one else has already answered the question. With the rapid growth in funding for addiction research internationally, particularly in the US, and a consequent growth in the literature, in many cases it is possible that someone else has already done the work you are considering. Nevertheless, there is often a good case to be made for researching a topic specifically in the NHS as international research may not translate to the UK health setting. The gold standard for making the case for a clinical trial is using the results of a meta-analysis of published studies which identifies significant gaps in knowledge or reasons to do another study. This topic has been covered in a previous review in this series, but basically there are many resources for meta-analyses including publication search engines such as PubMed or the Cochrane database. If there is no relevant meta-analysis already published, it may be worth doing secondary research (i.e. one reviewing published research) yourself as the first step in making the case for a new primary research study (i.e. one collecting new data). Often secondary research is easier to get funding for than primary research.

Sources of funding

The main funding sources for research are the Research Councils and the National Institute for Health Research (part of the Department of Health), all of which are government funded. Research councils relevant to clinical research include the Medical Research Council and the Economic and Social Research Council, both of which fund addiction research.

Each has a bewildering array of options for research funding, but can be mostly reduced to three main categories: research fellowships of various types, which provide funding for salaries of researchers at different levels of seniority, including clinicians. This can enable a clinician to study for a PhD. Project grants, which are usually for 3 year projects with funding up to £500K, but in the case of clinical trials this can be as much as £2M or more; and programme grants, which involve a series of related research projects with funding ranging from £1-3M.

Grant calls can be 'responsive', which means you can put in an application on any topic providing it meets the overall specifications of the grants scheme. The committees usually meet three or four times a year.

Alternatively there are topic-specific calls for proposals. If you are affiliated to a university or have a particularly proactive R&D department, you can subscribe to various email alerts and some funders provide such subscriptions on their websites. Recently, the MRC put out a call for addiction research capacity building 'clusters' which aim to lead to specific funding for addiction research in various categories. The NIHR Health Technology Assessment Programme has recently put out a call for clinical alcohol research (including both primary and secondary research).

This sounds all well and good, but remember the first law of grant applications, particularly with the main funding bodies: "For whosoever hath, to him shall be given, and he shall have more abundance". Depressing but true! This means that breaking into funding from MRC or NIHR is an uphill challenge. The best way for someone new in research to obtain funding from these sources is to apply with someone who already has a track record of grant funding. The NIHR Research for Patient Benefit funding, which is administered on a regional basis, can be easier to break into (except in London!) but funds are more limited than for the project or trial grants from NIHR. Wellcome also offers a range of grants with similar criteria, but as with MRC and NIHR, these tend to be highly competitive and usually heavily oversubscribed.

Internationally, the US National Institutes of Health (particularly the National Institute of Drug Abuse) sometimes fund research in the UK. But it has to demonstrate why this research cannot be done in the US. Also the European Commission funds research in addictions mainly through its Framework Programmes (FP). To be eligible you need to find a number of European partners and demonstrate that this needs to be done on a Europe wide basis. With both NIH and EC, be prepared for extensive paperwork!

Other sources for funding addiction research which are perhaps a bit more open to less experienced researchers include: the Alcohol Education and Research Council, which funds projects around £50-100K; Joseph Rowntree Foundation; Big Lottery Fund; and a host of smaller charities. However, it is important to note that a lot of the charities have lost income during the current recession, so gaining funding from this source is becoming harder.

The pharmaceutical industry is an important source of research funding. However, researchers need to be clear about academic independence and freedom to publish. The alcohol, tobacco, and gambling industries also fund addiction research, but this should be avoided because of inherent conflicts of interest. These issues have been extensively covered in Addiction and other journals recently.

What is the funder looking for in the winning bid?

Most of the main funding bodies have similar criteria on which they evaluate research grant proposals. The MRC provides some really useful resources on grant writing and reviewing which are specific to funding →

Prof Colin Drummond, SCAN lead, and professor of addiction psychiatry, Institute of Psychiatry, King's College London

Dr Julia SInclair, consultant addictions psychiatrist and senior lecturer, University of Southampton

How to get clinical research funded

streams but also provide a general guide on what is looked for by referees and grants committees. With each proposal it is crucial to look at the published specifications and evaluation criteria for grant applications. Sometimes the funders offer briefing sessions which are important to attend, as they can offer a better feel for the 'between the lines' criteria they are applying. With this knowledge, you need to make sure your application fully meets all the criteria.

The areas MRC (and most other funding bodies) are particularly concerned with are:

- Importance: how important are the questions, or gaps in knowledge, that are being addressed?
- Scientific potential: what are the prospects for good scientific progress? Within this area, the committee is as much interested in the quality and track record of the team as the quality of the proposed research; it may be a good idea, but are these researchers likely to be able to deliver?
- Resources requested: are the funds requested essential for the work, and do the importance and scientific potential justify funding on the scale requested?

Writing your application

This section really applies to any application for funding.

1. Fit: Make sure you have carefully read the brief and understand what is being looked for against the specific grant scheme. It is a terrible waste of time to put an application together if it does not fit the remit of the call.
2. Time: You need to block out significant time to write the application. Also bear in mind that most NHS and academic organisations will need to provide various approvals before the grant application can be submitted, so factor this in.
3. People: Make sure you have the right people onboard. This includes those with the expertise and a track record appropriate to your application (e.g. psychology, statistics, health economics, trial design, service users, finance people). Reviewers often pick up on this if they see gaps. Also, having experienced researchers inspires confidence in funders and they may even help you to improve and refine the application to make it more competitive!
4. Plan: if you have several people working on an application, by when do you need their contributions in order to meet the deadline? Have you clearly detailed what it is you want from them?
5. Explain: tell the funders in plain English what you plan to do. If you must use jargon make sure it is explained. Think about who is likely to read it. Often referees and committee members are not experts in your particular area. If you are using acronyms, spell them out the first time in the text. Use short sentences and paragraphs – it helps the readability.
6. Sell: make sure you spell out the project's unique selling points and the strengths of your team. Why are you best placed to do this? Why does this project really have to be done now?
7. Follow the detailed guidance on completing the application. This includes sticking to the word count (often funders use electronic forms which restrict word count, fonts etc).
8. Check and double check: Make sure the whole application is spell checked, and track changes removed. There is nothing worse than seeing someone's comments from earlier drafts, although it can be mildly amusing! It is helpful to have someone from outside your field test it for readability and errors. One of the perils of overfamiliarity with a document is not spotting the flaws, particularly when you get to the 10th draft.

Politics and gamesmanship

Getting research funding is not easy and so to maximise your chances there are a few legitimate things you can do to increase the saleability of the project.

1. Look at other successful bids: see what it is that made them fundable. Or if you can't do that, talk to successful researchers and ask their advice.
2. Money: Think carefully about the likely scale of the funding. What does this funder usually spend on clinical trials in psychiatry or addiction? If your costs are widely different (above or below) can you justify this? If there is a limit on the funding available will you really be able to do what is proposed in the timescale? There is no point in getting the money at all costs and then not being able to deliver.
3. What are the preoccupations of the funder? Often funding bodies will produce general guidance on what business they feel they are in. The Health Technology Assessment programme is interested in pragmatic trials in the typical NHS setting and secondary analysis. NIHR is keen on engagement with NHS stakeholders and service users as well as relevance to the NHS. MRC is interested in being at the 'cutting edge' of international competitiveness. There are of course many more, so you need to look carefully.
4. Partnerships: For a particular call think about who the competition might be and, if they are competitive, ask yourself if it would be more useful to go into partnership rather than compete with them. Would these partnerships give you a strategic advantage? Could you work well together?

The answer

The email/letter you have been waiting for finally arrives, and you open it with anticipation.

Good news: Congratulations all round. Now the really hard work starts!

Bad news: Well nobody likes bad news, but unfortunately with competitive research funding this is all too common. It once took one of us (CD) eight years and four unsuccessful applications to get a particular research topic funded. And funnily enough the successful application was remarkably similar to the very first one! Nothing is guaranteed. Grant committees don't hate researchers, they just find better, more interesting, more competitive things to fund (from their point of view, obviously!).

So in the short term you need to debrief, reflect, and move on to the next project. But don't shred the application in a fit of pique. Put it in the bottom drawer ready to be dusted off, revamped and submitted when the topic becomes more timely, as it often does. Learn from the application process. Ask for feedback, change your strategy, review your bidding team and apply this to the next one. You may well have better luck next time.

This article is partly based on a SCAN workshop on "How to write the winning bid" at the Royal College Addictions Faculty meeting in Edinburgh, 2009.

RESOURCES

Medical Research Council: mrc.ac.uk
National Institute for Health Research: nihr.ac.uk
Economic and Social Research Council: esrc.ac.uk
The Wellcome Trust: wellcome.ac.uk
Alcohol Education and Research Council: aerc.org.uk
Joseph Rowntree Foundation: jrf.org.uk
Big Lottery Fund: biglotteryfund.org.uk
National Institute on Drug Abuse: nida.nih.gov
National Institute of Alcohol Abuse and Alcoholism: niaaa.nih.gov
European Commission Framework Programme: cordis.europa.eu/fp7
Association of Medical Research Charities: amrc.org.uk

Classic studies revisited... in the second of our historical reviews, Caroline Cooper considers a paper written over 50 years ago by Harris Isbell et al.

An Experimental Study of the Etiology of Rum Fits and Delirium Tremens

Despite the fact that alcohol has been known to be related to seizures since Roman times, (then referred to as "morbus convivialis", or "disorder related to partying"), it was not until the mid- 1950s that convulsions and delirium tremens received research attention as symptoms of alcohol withdrawal. At this time two key papers were published: a report by Victor and Adams,[1] which systematically described the alcohol withdrawal syndrome, and Isbell et al's 1955 paper.[2] At the time, it was generally accepted that the withdrawal of alcohol played no part in the precipitation of "rum fits", although Victor and Adams' paper concluded that abstinence in alcoholics could precipitate "tremulous-hallucinatory-epileptic-delerious states".

Isbell's paper is a classic study which provided the first experimental evidence that alcohol can produce physical dependence, and is unlikely to ever be repeated: ethical considerations for study participants were perhaps not as rigorous then as they are now!

At the time of the study, growing research facilities across US university departments were catalysed by the specialist Yale Center which originated in the 1940s (the National Institute on Alcohol and Alcohol Abuse was not established until 1970). Although the Society for the Study of Addiction and the British Journal of Addiction had been founded over a century before, the number of research articles produced (particularly those based on data rather than opinion) were far fewer than the American Quarterly Journal of Studies on Alcohol, the publisher of this research. The AA movement and national lobbying organisations and temperance movements were also more established in the US then, and their influence partly drove the acceptance of the disease concept of alcoholism.[3]

Setting of the study

The Public Health Service Narcotics Hospital at Lexington, Kentucky was one of the first research laboratories in the National Institute of Mental Health (NIMH), and the only laboratory in the world entirely dedicated to studying addiction at the time, the Addiction Research Center (ARC). Harris Isbell and Abraham Wikler were its research director and associate director during the 1950s. The 'Narcotics Farm' next door provided the ARC with space, laundry and dining services, and "allowed us to borrow some of their patients," as Isbell later put it. The ARC had access to recently detoxified prisoners who were serving sentences for violation of the Harrison Narcotic Act, used as research subjects from the mid-30s until 1976.

The study

We are introduced by name to the ten "volunteers", all former morphine addicts who participated in the study, having been warned of "the dangers inherent in the procedure", who had no significant physical defects, and psychiatric diagnoses of "character disorder or inadequate personality". We are told something of their histories – their delinquency, vagrancy, livings earned "barely within the fringes of the law", or frankly outside it in "pandering, bootlegging and gambling", and the revelations from their Rorschach testing of diagnoses ranging from narcissism to "confusion over sexual identification" to sadism.

The volunteers were given 266 to 489 ml of 95% alcohol diluted in water or fruit juice daily for seven to 87 days (a fruit juice or water "chaser" was also permitted if desired) – about 25 to 45 units of alcohol per day, and a good diet with vitamin supplementation. The objective was to maintain each subject continuously in the maximum possible state of intoxication, which was compatible with "safe ambulatory management" ("grade 2" – on a scale of 0-4, ranging from 0: no intoxication, 1: garrulousness, 2: motor impairment, 3: belligerence and reeling gait to 4: coma), for a period of at least six weeks, and then to suddenly stop the alcohol.

Although psychological testing was planned for the period of maximum alcohol consumption, this proved impossible to carry out! Alcohol was given every 1-2 hours during the day, with supplementary drinks in the early hours. Four patients, who withdrew from the experiment after 34 or fewer days of drinking, had only mild symptoms after discontinuation of alcohol – their "chronic intoxication" lasting an insufficient time for a high degree of physical dependence to develop. There were no convulsions or delirium during the period of chronic alcohol administration, although several participants experienced tremor prior to their first drink of the day.

Following abrupt withdrawal of alcohol, all six patients who drank for more than 48 days developed tremor, weakness, vomiting, hyperreflexia, fever and hypertension. 'Charley' had seven grand mal seizures between 12 and 34 hours of abstinence (from 420mls alcohol per day for over two months), treated with doses of barbiturates and antibiotics. He experienced a period of delirium with disorientation and confabulation, but returned to his pre-experimental mental state after six weeks. 'Junior' had seizures after 41hrs of abstinence, having hallucinated for 29hrs, but "required" no medical treatment. Two other patients had →

United States Narcotics Farm, Lexington, Kentucky, in the 1960s.

SCAN Annual Conference
Radisson SAS Manchester Airport, 17/18 September
scan@nta-nhs.org.uk
020 7972 1982

SCAN Policy Advisor's secondment ends

After 18 months the SCAN team bids farewell to Dr Julia Sinclair. As SCAN policy advisor Julia made an enormous contribution to all areas of SCAN's work, particularly as SCANbites commissioning editor. Julia also produced excellent proposals for future SCAN developments, which are happily at an advanced stage of discussion with funders.

Her sense of humour was particularly welcome at a difficult time in SCAN'S development.

Julia continues with the Winchester Community Alcohol Team as consultant addiction psychiatrist, and as a senior lecturer in psychiatry at Southampton University. We thank Julia for her enthusiasm and energy during her time with SCAN and wish her all the best for the future, though she is certain to continue to be an active member of the Specialist Clinical Addiction Network.

Historical Review

a frank delirium, one involving complex persecutory psychotic symptoms, two had transient visual or auditory hallucinations including seeing disembodied heads, dwarves and snakes, and hearing voices and screaming. One patient escaped both convulsions and hallucinations. All three EEGs taken from the withdrawing patients showed abnormalities regardless of whether or not they had seizures, and withdrawal symptoms correlated approximately with duration and amount of alcohol consumed.

Having described each individual's behaviour during the early stages of the study, their response to intoxication, and the abstinence period, the authors tell how it took up to three months after the start of withdrawal for all physical, psychiatric and psychological measures to return to pre-investigation levels.

Conclusions

The authors make comparisons with barbiturate withdrawal and with the symptoms found by Victor and Adams, and comment on the amount of alcohol consumed by the study volunteers, and the low levels of blood alcohol and clinical intoxication in some individuals suggestive of a "metabolic tolerance". Some patients' experiences of abstinence symptoms whilst still drinking was attributed to the drop in blood alcohol – evidence which is "formidable and cannot be disregarded".

This gives rise to some practical suggestions relevant today – that there should be a slow withdrawal of alcohol from chronically intoxicated persons, but with the caveat that alcohol may not be the best drug for this due to its short half-life and narrow therapeutic window, its gastric irritation and poor nutritional value. Instead the authors suggest that sedation, rather than being a symptomatic treatment for the agitation of withdrawal (the perceived view at the time), may be a specific substitute treatment, "just as methadone is an adequate pharmacological substitute for morphine".

They conclude that "Abrupt withdrawal of alcohol from chronically intoxicated persons is followed by a definite abstinence syndrome which, in some patients includes convulsions or a delirium or both". Although this study had serious ethical problems, it should be judged in the context of its time and arguably it contributed to a more enlightened, safer and more humane approach to the care of people with alcohol dependence. Without it we might have a lesser understanding of the pharmacology of alcohol consumption – a gain for science but at what ethical cost?

REFERENCES

1. **Victor, M. & Adams, R.D. (1953) The effect of alcohol on the nervous system. Proceedings of the Association of Research on Nervous and Mental Diseases, 32, 526-573.**
2. **Isbell, H., Fraser, H.F., Wikler, A. Belleville, R.E. & Eisenman, A.J. (1955) An experimental study of the etiology of rum fits and delirium tremens. Quarterly Journal of Studies on Alcohol, 16(1), 1-33.**
3. **Edwards, G. (2008) Stranger in a strange land: insights from a visit to north America by a British student. Addiction, 103, 1949-1950.**

Dr Caroline Cooper, SCAN Trainee and specialist registrar, Nottingham Healthcare NHS Trust

EVENTS

REGIONAL

17 Jul	SOUTH WEST
16 Sep	LONDON
25 Sep	EAST
16 Oct	SOUTH EAST
16 Oct	SOUTH WEST
23 Oct	WEST MIDS
5 Nov	NORTH EAST
5 Nov	NORTH WEST

Contact details for the above are on scan.uk.net

NATIONAL

BAP 2009 Summer Meeting, 26-29 July, Oxford. lynne@bap.org.uk 01223 358 421

SCAN Conference, 17-18 September, Radisson SAS, Manchester Airport. Rebecca.murchie@nta-nhs.org.uk 020 7261 8706

INTERNATIONAL

SSA Annual Symposium 2009, 12-13 November, Park Inn, York. graham.hunt@leedspft.nhs.uk

SCANbites editorial team

Editor-in-Chief: Colin Drummond, *Production Editor:* Amy Wolstenholme, *Commissioning Editor:* Sally Braithwaite. *SCAN Trainee page editors*: Aideen O'Kane, Caroline Cooper and Julian Henry. *Administration and Distribution:* Rebecca Murchie. **SCAN**, 6th Floor, Skipton House, 80 London Road, London SE1 6LH scan@nta-nhs.org.uk Tel 020 7972 1982 Fax 020 7972 1999 www.scan.uk.net

Disclaimer: SCANbites does not contain official practice guidelines, nor is it an official information source. Therefore no liability is accepted for any loss or damage caused due to any action/inaction taken as a result of its contents (except for personal injury arising directly due to our negligence). Copyright in SCANbites belongs to the publishers and its licensors. All rights in SCANbites are reserved.

DH Department of Health

Royal College of Psychiatrists

NHS National Treatment Agency for Substance Misuse

SCAN is funded by the Department of Health and jointly supported by the Department of Health, the Royal College of Psychiatrists and the National Treatment Agency for Substance Misuse.

PUBLISHED BY SCAN, LONDON. COPYRIGHT SCAN. DESIGN & PRODUCTION SWALLOW CO LTD